No. 200200153

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Board of Regents, University of Nebraska

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE , OR CONDITIONING IT PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR T VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN D STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEE HALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS D, 7 U.S.C. 2321 ET SEQ.)

TRITICALE

'NE422T'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-seventh day of August, in the year two thousand and four.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

EPRODUCE LOCALLY. *Include form number and date on all reproductions*

Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER
Board of Regents, University of Nebraska

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME
NE96T422

3. VARIETY NAME
NE422T

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
Lincoln, NE 68583-0745

5. TELEPHONE *(include area code)*
402-472-7211

FOR OFFICIAL USE ONLY
PVPO NUMBER
200200153

6. FAX *(include area code)*
402-472-7904

FILING DATE
May 14, 2002

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*
Corporation

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
Nebraska

9. DATE OF INCORPORATION
February 15, 1869

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
Dr. Darrell W. Nelson, Dean and Director
Agricultural Research Division, IANR-UNL
Lincoln, NE 68583-0704

FEES RECEIVED

FILING AND EXAMINATION FEES:
$ 2705.00
DATE 5/14/2002

CERTIFICATION FEE:
$ 320.00
DATE 10/07/2002

11. TELEPHONE *(Include area code)*
402-472-2045

12. FAX *(Include area code)*
402-472-9071

13. E-MAIL
DNELSON@unl.edu

14. CROP KIND *(Common Name)*
Triticale

18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)

- a. ☒ Exhibit A. Origin and Breeding History of the Variety
- b. ☒ Exhibit B. Statement of Distinctness
- c. ☒ Exhibit C. Objective Description of Variety
- d. ☒ Exhibit D. Additional Description of the Variety *(Optional)*
- e. ☒ Exhibit E. Statement of the Basis of the Owner's Ownership
- f. ☒ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
- g. ☒ Filing and Examination Fee ($2,705), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? *See Section 83(a) of the Plant Variety Protection Act)*
☒ YES *(If "yes", answer items 20 and 21 below)* ☐ NO *(If "no," go to item 22)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? ☒ YES ☐ NO
IF YES, WHICH CLASSES? ☒ FOUNDATION ☒ REGISTERED ☒ CERTIFIED

21. DOES THE OWNER SPECIFY THAT THE CLASSES BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ YES ☒ NO
IF YES, SPECIFY THE NUMBER 1, 2, 3, etc. ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

(If additional explanation is necessary, please use the space indicated on the reverse.)

22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?
☐ YES ☒ NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?
☐ YES ☒ NO
IF YES, GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER
Darrell W Nelson

NAME *(Please print or type)*
Darrell W. Nelson

CAPACITY OR TITLE
Dean and Director

DATE
May 8, 2002

SIGNATURE OF OWNER

NAME *(Please print or type)*

CAPACITY OR TITLE

DATE

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable *(in the sense that it will reproduce an entire plant)* tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for $2,705 ($320 filing fee and $2,385 examination fee), payable to "Treasurer of the United States" *(See Section 97.6 of the Regulations and Rules of Practice.)* Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of $320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

20020153

Plant Variety Protection Office
Telephone: (301) 504-5518
FAX: (301) 504-5291
Homepage: http://www.ams.usda.gov/science/pvp.htm

ITEM

18a. Give:
(1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified

18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:

(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.

18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.

18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, *etc.*

18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.

19. If "Yes" is specified *(seed of this variety be sold by variety name only, as a class of certified seed)*, the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. *(See Regulations and Rules of Practice, Section 97.103).*

21. *See Section 83 of the Act for the Contents and Term of Plant Variety Protection.*

22. *See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.*

23. *See Section 5.5 of the Act for instructions on claiming the benefit of an earlier filing date.*

21. CONTINUED FROM FRONT *(Please provide a statement as to the limitation and sequence of generations that may be certified.)*

22. CONTINUED FROM FRONT *(Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)*

23. CONTINUED FROM FRONT *(Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)*

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. *(See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)*

To avoid conflict with other variety names in use, the applicant must check the variety names proposed by contacting: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089.

S&T-470 (2-99), designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (6-98) which is obsolete.

NE422T (PI 629028) Winter Triticale Application

Exhibit A. Origin and Breeding History

NE422T triticale (*X.Triticosecale rimpaui* Wittm.) was selected from the cross 'Trical'/'UB-UW26' where Trical is most likely 'Trical 100' (a forage triticale developed by Resource Seed Inc., a subsidiary of Goldsmith Seed Company, Gilroy, CA) and UB-UW26 is an unknown winter triticale germplasm line given to the breeding program in the 1980s. The cross was made in 1990. The F_1 to F_3 generations were advanced using the bulk breeding method. NE422T is an F_3-derived line that was selected in the F_4 generation. The F_1 generation was grown in the greenhouse in 1990-1. The F_2 and F_3 generations were grown in bulk at the Agronomy Farm at Lincoln, NE 1992 and 1993, respectively. Random heads were chosen from the F_3 bulk and planted as head rows which were harvested in 1994. The F_3-derived F5 family was harvested as a single observation plot in 1995. NE422T was identified as NE96T422 and was grown at three unreplicated locations in 1996. It has been tested in replicated forage trials at three locations per year in 1997 and 1998 in Nebraska and in 2000 and 2001 at Hays, Kansas. The criteria for selection were: a) adequate winterhardiness for propagation in Nebraska, b) agronomic performance (including forage yield) equal to or superior to commonly grown forage triticale varieties, and d) acceptable forage quality. NE422T was released primarily for its superior forage production in rainfed winter cereal production systems in Nebraska and Kansas.
NE422T was named and officially released in October, 2001 by the Nebraska Agricultural Experiment Station and the Agricultural Research Service, U.S. Department of Agriculture. The Nebraska Foundation Seed Division, Dep. of Agronomy and Horticulture, University of Nebraska-Lincoln, Lincoln, NE 68583 had NE422T foundation seed available to qualified certified seed enterprises (members of NuPride Genetics Network, part of the Nebraska Crop Improvement Association) in 2000 for seed increase. The first public sale of Certified seed was be in August, 2001. NE422T will be maintained by the Nebraska Agricultural Experiment Station with the following classes: Breeder, Foundation, Registered, and Certified. By agreement with the Nebraska Crop Improvement Certification standards, Registered seed is nonsalable. Breeder seed will be maintained by roguing Breeder Seed fields. The U.S. Department of Agriculture will not have seed for distribution. A research and development fee will be assessed on all certified seed sales.

NE422T has been uniform and stable since 1999. Less than 0.5 % of the plants were rogued from the Breeder's seed increase in 1999. The rogued variant plants were taller in height (10 - 20 cm, 1:10,000 plants), or were shorter in height (25 to 30 cm) and later in maturity (3 to 4 d later, 1:8000 plants). Up to 1% (10:1000) variant plants may be encountered in subsequent generations.

Exhibit B. Novelty Statement

To our knowledge, NE422T most nearly resembles in appearance the forage triticale Trical 100, but can be distinguished by the following characteristics:

1. NE422T has yellow anthers whereas Trical 100 has purple anthers.

2. NE422T has a pubescent glume whereas Trical 100 has a glaborous (non-pubescent) glume.

Exhibit C. See Attached Sheet.

Exhibit D. Additional Description of the Variety.

NE422T is an awned, white-glumed cultivar whose primary use will be as an annual forage crop. Its field appearance is most similar to 'Trical 100'. Kernels are red colored, elliptical, large, and slightly wrinkled (as is common with triticale). After heading, the canopy is moderately closed and upright. The flag leaf is recurved and not twisted at the boot stage. The foliage is green with a waxy bloom at anthesis. The peduncle is not pubescent. The spike is oblong in shape and middense. The glume is pubescent, tan, narrow, and midlong and the glume shoulder is wanting. The beak has an acuminate tip. The spike is usually nodding at maturity. Based on plump kernels, the kernel has no collar, a large brush of long length, rounded cheeks, large germ, and a narrow and deep crease.

NE422T was performance tested as NE96T422 in Nebraska grain yield nurseries starting in 1997 and in forage yield trials in 1997 and 1998. In two years of forage testing in Nebraska cultivar performance trials, NE422T has performed extremely well throughout most of Nebraska in rainfed production systems. The average Nebraska rainfed forage yield cut at the R2 (fully headed but the peduncle not fully emerged) to R4 (anthesis, Nebraska scale; Moore et al., 1991) of NE422T (6 environments) was 9070 kg/ha dry matter; with an average *in vitro* dry matter digestability of 63.9% and an average protein content of 90 g kg^{-1}. These data compare favorably with Newcale (a grain triticale: 8730 kg/ha, 67.9%, and 85 g kg^{-1}) and Trical 100 (8530 kg/ha; 63.5%, and 90 g kg^{-1}). For further comparison, the forage yields of NE422T were higher than two commonly grown wheat (*Triticum aestivum* L.) cultivars 'Arapahoe' (7200 kg/ha, 67.7%, 85 g kg^{-1}) and 'Pronghorn' (7930 kg/ah, 67.0%, 86 g kg^{-1}). The wheat cultivars are earlier than NE422T and were cut at the R4 to S0 (caryopsis visible, Nebraska scale). NE422T has a good grain yield (10 environments; 2790 kg/ha) for a forage triticale. The grain yield was higher than Trical 100 (2040 kg/ha), but lower than grain triticale cultivars ('Presto', 3620 kg/ha; Newcale, 3120 kg/ha). For comparison, the grain yield of Arapahoe was 3050 kg/ha, which is lower than the grain triticale yields and might be explained by triticale yield nurseries generally be planted near, but earlier than the wheat yield trials. The main advantages of NE422T when compared to most other forage triticale cultivars, within its area of adaptation, is its high forage yield coupled with a good grain yield and its broad adaptation in rainfed production systems.

Other measurements of performance from comparison trials show that NE422T is late in maturity, about 7 d later than Newcale, 6 d later than Presto, 5 d later than Arapahoe, and 1 d earlier than Trical 100. The mature plant height of NE422T; a tall triticale (148 cm) is 7.5 cm taller than Trical 100, 31 cm taller than Presto and Newcale, and 49 cm taller than Arapahoe. NE422T has moderate straw strength for a tall, forage triticale. NE422T is slightly better than Trical 100 lodging, but worse than Presto, Newcale, and Arapahoe. The winter hardiness of NE422T would be consider as good, similar to Trical 100 which is one of the most winter hardy triticale cultivars currently available to grower, and comparable to an average winter wheat for this trait.

Based on field observations, NE422T is resistant to the currently prevalent races of stem rust (caused by *Puccinia graminis Pers.: Pers. f. sp. tritici* Eriks & E. Henn; most likely containing *Sr31*) and leaf rust (caused by *P. triticina* Eriks.). Like most rye (*Secale cereale* L.) and triticale cultivars, NE422T is moderately resistant to wheat streak mosaic virus. Ergot (caused by *Claviceps purpurea* (Fr:Fr) Tul.) has not been found in the cultivar when the disease was present in the other triticale varieties under similar growing conditions. NE422T has an average grain volume weight for triticale.

NE422T should be well adapted to most rainfed winter annual forage production systems, with high forage yield potential in Nebraska. It should also perform well as a second crop in irrigated production systems, where NE422T is planted following a harvested summer annual crop and the forage is harvested the following year before planting another annual summer crop. In these cropping systems, water would not be limiting and three crops could be harvested in two years. It should perform well in similar growing areas in adjacent states.

Exhibit E. Statement of the Basis of the Applicant's Ownership

The University of Nebraska is the applicant for protection in the case of NE422Twinter forage triticale being the variety for which Plant Variety Protection is hereby sought was developed by Drs. P.S. Baenziger, employee of the University of Nebraska and K. P. Vogel, employee of the USDA-ARS. By agreement between employees of the University of Nebraska and by agreement between USDA-ARS and the University of Nebraska, all rights to any variety made by employees while employed by the University of Nebraska or by the USDA-ARS employees stationed at the University of Nebraska are assigned to the University of Nebraska, with no rights of any kind to NE422T being retained by the employees.

FORM APPROVED: OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN AND SEED DIVISION
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Triticale)

OBJECTIVE DESCRIPTION OF VARIETY

TRITICALE

NAME OF APPLICANT(S)	VARIETY NAME OR TEMPORARY DESIGNATION
Board of Regents, University of Nebraska	NE422T (NE96T422)
ADDRESS (*Street and No., or F.F.D. No., City, State, and ZIP Code*)	FOR OFFICIAL USE ONLY
Lincoln, NE 68583-0745	PVPO NUMBER 200200153

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. GROWTH HABIT:

[3] 1 = SPRING 2 = INTERMEDIATE 3 = WINTER

[1] Juvenile Plant Growth: 1 = PROSTRATE 2 = SEMIPROSTRATE 3 = ERECT

[ ] Photoperiod: 1 = INSENSITIVE 2 = SENSITIVE Not Sure, Likely Sensitive

2. PLOIDY:

[1] 1 = HEXAPLOID 2 = OCTOPLOID 3 = OTHER (Specify)_____

[4][2] 2n CHROMOSOME NUMBER

3. MATURITY (50% Flowering):

[5] 1 = VERY EARLY 2 = EARLY 3 = MIDSEASON 4 = LATE 5 = VERY LATE

[ ][1] DAYS EARLIER THAN TRICAL 100 . . . . . [ ]

[ ][6] DAYS LATER THAN PRESTO . . . . . [ ]

1 = CARMACK 2 = ROSNER 3 = PATHFINDER
4 = 6TA 204 5 = ARMADILLA

4. HEIGHT:

[1][4][8] CM. HIGH [5] 1 = DWARF 2 = SEMIDWARF 3 = SHORT 4 = MIDTALL 5 = TALL

[ ][ ] CM. SHORTER THAN . . . . . [ ]

[ ][7] CM. TALLER THAN TRICAL 100 . . . . . [ ]

1 = CARMACK 2 = ROSNER 3 = PATHFINDER
4 = 6TA 204 5 = ARAMADILLA

5. PLANT COLOR AT BOOT STAGE:

[2] 1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN

6. STEM:

[1] Anthocyanin: 1 = ABSENT 2 = PRESENT

[1] Neck Hairiness: 1 = NONE 2 = SLIGHT 3 = MODERATE 4 = HEAVY

[1] Shape Of Neck: 1 = STRAIGHT 2 = WAVY 3 = OTHER (Specify)_____

7. LEAVES:

[1] Flag Leaf: 1 = NOT TWISTED 2 = TWISTED

[3][0] CM. LEAF LENGTH: 1st Leaf Below Flag Leaf

[2] Waxy Bloom On Leaf At Boot: 1 = ABSENT 2 = PRESENT

[1][9] MM. LEAF WIDTH: 1st Leaf Below Flag Leaf

[2] Leaf Carriage: 1 = UPRIGHT 2 = RECURVED 3 = DROOPING

[1] Auricle Color: 1 = COLORLESS OR WHITE 2 = PURPLE 3 = OTHER (Specify)_____

6

200200153

8. HEAD:

[2] Density: 1 = LAX 2 = MIDDENSE 3 = DENSE

[2] Shape: 1 = FUSIFORM 2 = OBLONG 3 = CLAVATE 4 = ELLIPTICAL 5 = OTHER (Specify)_____

[4] Awnedness: 1 = AWNLESS 2 = APICALLY AWNLETTED 3 = AWNLETTED 4 = AWNED

[3] Awn Color: 1 = WHITE 2 = YELLOW 3 = TAN 4 = BROWN 5 = BLACK

[9][6] CM. HEAD LENGTH 9.6 cm

[1][4] MM. HEAD WIDTH

9. GLUMES AT MATURITY:

[3] Pubescence: 1 = GLABROUS 2 = SLIGHTLY PUBESCENT 3 = PUBESCENT

[3] Color: 1 = WHITE 2 = YELLOW 3 = TAN 4 = BROWN 5 = BLACK

[2] Length: 1 = SHORT 2 = MIDLONG 3 = LONG [1] Width: 1 = NARROW 2 = MIDWIDE 3 = WIDE

[1] Shoulder: 1 = WANTING 2 = OBLIQUE 3 = ROUNDED 4 = SQUARE 5 = ELEVATED 6 = APICULATE [3] Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE

10. COLEOPTILE COLOR:

[2] 1 = WHITE 2 = GREEN 3 = PURPLE

11. SEED:

[3] Shape: 1 = OVATE 2 = OVAL 3 = ELLIPTICAL

[2] Smoothness: 1 = SMOOTH 2 = SLIGHTLY WRINKLED 3 = WRINKLED

[3] Brush Area: 1 = SMALL 2 = MIDSIZE 3 = LARGE

[2] Brush Length: 1 = SHORT 2 = MIDLONG 3 = LONG

[ ] Phenol Reaction: 1 = IVORY 2 = FAWN 3 = LIGHT BROWN 4 = BROWN 5 = BROWN BLACK

[6] Color: 1 = WHITE 2 = AMBER 3 = RED 4 = PURPLE 5 = BLACK 6 = OTHER (Specify) TAN

[ ][ ] GMS. PER 1,000 SEED

12. DISEASE (0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Tolerant):

[2] STEM RUST (Races) FIELD RACES

[2] LEAF RUST (Races) FIELD RACES

[2] STRIPE RUST (Race) FIELD RACES

[3] ERGOT FIELD RACES

[0] POWDERY MILDEW_____

[ ] BACTERIAL STRIPE

[0] SEPTORIA

[ ] YELLOW DWARF

[ ] OTHER (Specify)_____

[ ] OTHER (Specify)_____

13. INSECT (0 = Not Tested, 1 = Susceptible, 2 = Resistant, 3 = Tolerant):

[0] GREENBUG

[0] CEREAL LEAF BEETLE

[ ] OTHER (Specify)_____

HESSIAN FLY RACE: NOT TESTED

[ ] GP [ ] A [ ] B [ ] C

[ ] D [ ] E [ ] F [ ] G

7

14. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	VARIETY
PLANT TILLERING	TRICAL 100
WINTER HARDINESS	TRICAL 100
AREA OF ADAPTATION	TRICAL 100
SEED SHAPE	TRICAL 100

REFERENCES:

L. W. Briggle and L. P. Reitz, 1963, Classification of Triticum Species and Wheat Varieties Grown in the United States, Technical Bulletin 1278, USDA.

W. E. Walls, 1965, A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity, Contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts.

COMMENTS:

REPRODUCE LOCALLY. *Include form number and edition date on all reproductions.* FORM APPROVED - OMB NO. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Board of Regents, University of Nebraska	NE422T	NE96T422
4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP, and Country)*	**5. TELEPHONE** *(include area code)*	**6. FAX** *(include area code)*
Lincoln, NE 68583-0745	402-472-7211	402-472-7904
	7. PVPO NUMBER 200200153	

8. Does the applicant own all rights to the variety? *Mark an "X" in appropriate block.* **If no, please explain.** [X] YES [ ] NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company? [X] YES [ ] NO
If no, give name of country

10. Is the applicant the original owner? [X] YES [ ] NO ***If no, please answer one of the following:***

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?

[ ] YES [ ] NO **If no, give name of country**

b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company?

[ ] YES [ ] NO **If no, give name of country**

11. Additional explanation on ownership *(if needed, use reverse for extra space)*:

SEE ATTACHED

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.

2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.

3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.